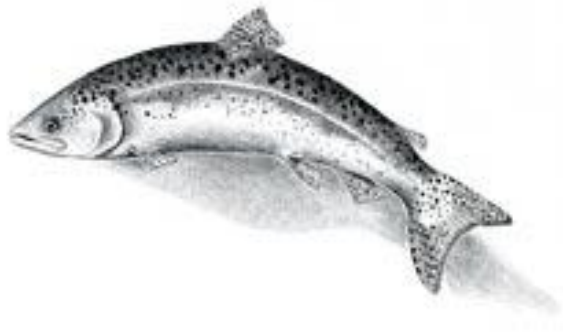




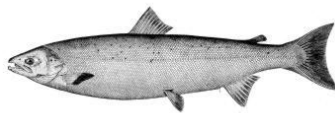
# **California Department of Fish and Game Fort Bragg Site Handbook**





## **Watershed Stewards Project Mission**

The mission of the AmeriCorps Watershed Stewards Project is to conserve, restore, and enhance anadromous watersheds for future generations by linking education with high quality scientific practices.



*Coho Salmon*



## Table of Contents

<b>Introduction.....</b>	<b>4</b>
Site Description .....	4
General Calendar of Duties at DFG Fort Bragg .....	5
Description of Site Duties.....	6
<b>ISPs and Outreach Events.....</b>	<b>8</b>
ISP Information .....	8
Volunteerism .....	8
Calendar of Outreach Events for Site / Community (Optional).....	8
<b>Education .....</b>	<b>9</b>
Education Notes.....	9
Site / Region Specific Education Resources .....	9
<b>Local Ecology .....</b>	<b>10</b>
Descriptions of Local Ecology.....	10
<b>Housing and Local Resources .....</b>	<b>11</b>
Housing Contact List.....	11
Local Resource .....	11
<b>Community Information .....</b>	<b>12</b>
Map of Area .....	12
Community Demographics.....	12
Community Services .....	12
<b>Entertainment and Community Events .....</b>	<b>13</b>
Resources for Affordable Entertainment Options .....	13
Recurring Event List.....	13
<b>Helpful Hints .....</b>	<b>14</b>
Prepare for the Field .....	14
<b>Supplemental Information .....</b>	<b>15</b>
Ed Logs & Information .....	15
ISP Logs & Information .....	15
Site Protocols & Information .....	15



## Introduction

### Site Description

*Location*

Fort Bragg, CA

*Agency Affiliation*

California Department of Fish and Game

*General Ecology*

Located on the coast of northern California, the area around Fort Bragg consists of mostly coastal redwood forest. The climate is mild, with winter rain and summer fog, and maintains a fairly even temperature.

Below is Amber Villalobos holding a Coho down in the ECS.



Below is Julie Coombes recording data during Core Habitat surveys.





**General Calendar of Duties at DFG Fort Bragg**

Month	Location	Site Duties	Work Load	Typical Work Hours
<b>Sean Gallagher- Coastal Salmonid Monitoring Program</b>				
January	Field	WSP Member Orientation Spawner Training Spawner surveys	Busy	10 hour days – 4 days/wk (M-Th 7:00-5:30)
February	Field	Spawner surveys Data Entry	Busy	10 hour days – 4 days/wk (M-Th 7:00-5:30)
March	Field/Classroom	Spawner surveys Downstream migrate traps Start Real Science SRF Conference	Busy	10 hour days – 4 days/wk ( 7:00-5:30)
April	Field/Classroom	Spawner surveys Downstream migrate traps Complete Real Science Science Fair	Busy	10 hour days – 4 days/wk ( 7:00-5:30)
<b>Coastal Watershed Planning and Assessment Program</b>				
May	Field/Office	Summer Field Season Prep Downstream migrant traps Stream inventory training Landowner Access Stream Inventory WSP Spring Training	Moderate	10 hour days – 4 days/wk ( 7:00-5:30)
June	Field/Office	Stream habitat inventory Data Entry & Reports	Moderate	10 hour days – 4 days/wk (M-Th 7:00-5:30)
July	Field	Stream habitat inventory Eel River Steelhead Surveys Data Entry & Reports	Moderate	10 hour days – 4 days/wk (M-Th 7:00-5:30)
August	Field	Stream habitat inventory Data Entry & Reports Site Binder ISP	Busy	10 hour days – 4 days/wk (M-Th 7:00-5:30)
September	Field	Stream Habitat inventory Snorkel Surveys Data Entry & Reports E-Fishing	Moderate	10 hour days – 4 days/wk ( 7:00-5:30)
October	Field/Office	Data Entry & Reports Complete Field Season	Moderate	10 hour days – 4 days/wk (M-Th 7:00-5:30)
<b>Sean Gallagher- Coastal Salmonid Monitoring Program</b>				
November	Office/Field	Winter Field Season Prep Spawner Surveys Wrap-up term Celebration	Moderate	10 hour days – 4 days/wk (M-Th 7:00-5:30)



## Description of Site Duties

### *Stream Habitat Inventory*

Members perform field work to assess fish habitat in coastal redwood forests using pilot Core Habitat protocol. Members hike streams to identify, categorize, and measure various components of the stream habitat important for fish spawning and rearing. During this time members may also be conducting snorkel surveys in various watersheds in the region.

### *Stream Habitat Data Entry*

Members will enter data collected from the stream habitat inventories into a computer database.

### *Spawner Surveys*

Members survey and monitor local watersheds to collect data on spawning salmonids. Members hike or kayak streams looking for live fish, carcasses, redds, or flags marking previously sighted redds. Data is then entered into a database to help estimate the fish populations. During this time, members will also be assisting with the operation of a weir and egg collecting station in order to monitor adults traveling upstream. Members will have a chance to floy tag and identify adult salmonids.

### *Downstream Migrant Trapping*

Members will assist in the set-up and operations of fyke-nets and a screw trap to estimate salmonid smolt abundance. Juveniles salmonids are captured, identified, measured, and marked on their way down-stream

Julie unloading ATV for Core Habitat Sampling.



Amber holding an adult Coho at the Egg Collection Station.





Co-mentor Wendy swinging over deep pool, looking for redds.





## ISPs and Outreach Events

### ISP Information

The Fort Bragg area is filled with State Parks so we teamed up with California State Parks Senior Environmental Scientist Renee Pasquinelli and conducted an invasive pull in Russian Gulch

#### Additional Contacts:

Renee Pasquinelli  
(707) 937-5721  
rpsquinelli@parks.ca.gov

Jughandle Creek Farm and Nature Center  
(707) 964-4630  
email: jughandle@creek.org

Robert Hovac (calfire)  
Email: Robert.Horvat@fire.ca.gov

Matt Coleman  
Big River Stewards Volunteer Coordinator  
(707) 962-0470  
Email:  
mcoleman@mendocinolandtrust.org

Helene Chaffin  
(707) 964-1825  
Email: jughandle-ed @mcn.org

Arlene Fuller  
Email: fuller4h@mcn.org

### Volunteerism

2010 volunteered with DFG Marine, Humane Society and at Cabrillo Lighthouse. Marine personnel are located downstairs.

In April the 2010 members joined Sean Gallagher in judging 7<sup>th</sup> to 11<sup>th</sup> grade participants in the Ukiah Science fair held at Mendocino College in Ukiah.

There are several other places in the area that would be great places to complete outreach hours, such as the Botanical Gardens, Big Brothers and Big Sisters, Food Gardens or local food bank.

### Calendar of Outreach Events for Site / Community (Optional)

#### *Mendocino Coast Whale Festivals*

Held each year in March the Whale Festivals in Mendocino and Fort Bragg have a wide variety of activities, some of which you could volunteer for.

<http://www.mendowhale.com/>

#### *World's Largest Salmon Barbeque*

An annual event, the World's Largest Salmon Barbeque, is held the weekend of July 4<sup>th</sup> to benefit the Salmon Restoration Association. The DFG and WSP wish to have continued involvement in the future. AmeriCorps members work an AmeriCorps table at this event.

<http://www.salmonrestoration.com/bbqmain.html>

#### *Other Resources*

Check out the local newspapers and radio stations for potential outreach events. Helene Chaffin with Jughandle Creek Farm and Nature Center also organizes a variety of outreach events.





## Education

### Education Notes

The Real Science program is to be completed in March and April. Schedule classroom visits back to back so the requirement will not take away too much time from field work. We conducted the Real Science program at Dana Grey Elementary School. We picked up our fish for dissection at the DFG Warm Springs Fish Hatchery near Healdsburg, coordinate with education team leader or call Ellen at Warm Springs Hatchery to schedule a direct pickup. 2009 members had a field trip for their last visit at the Noyo River ECS with three different stations 1) the rotary screw trap 2) aquatic invertebrate collection 3) the ECS. Details can be found on the X drive under the AmeriCorps education folder. In 2010 the schools were unable to provide the resources needed to have the kids take the field trip out to the Noyo.

Previous lesson plans, activities, visuals, etc. can be found on the X drive, under AmeriCorps\_WSP>Watershed Stewards Project>Real Science.

### Site / Region Specific Education Resources

School	Location	Phone Number (707 area code)
Dana Gray Elementary	Fort Bragg	961-2865
Redwood Elementary	Fort Bragg	961-2860
Fort Bragg Middle School	Fort Bragg	961-2870
Fort Bragg High School	Fort Bragg	961-2880
Noyo High School	Fort Bragg	961-2889
Mendocino Grammar School	Mendocino	937-0515
Mendocino Middle School	Mendocino	937-0564
Mendocino High School	Mendocino	937-5871

Below is Amber dissecting a salmonid at Regional Training 2010.





## Local Ecology

### Descriptions of Local Ecology

*Coastal  
Redwood  
Forests*

Coastal redwood forests occur along a 450 mile strip of land from Southern Oregon to Monterey, California. Since coast redwood trees, which dominate the forest, prefer sheltered, well-watered places with rich soil, the forest are rarely more than 20 miles inland from the Pacific Coast and can reach up to 2,000 feet in elevation (basically as far inland as the fog drifts). Coastal Redwood trees are the world's tallest trees, often growing over 300 feet tall. Coastal Redwoods are also some of the oldest living trees with some reaching over 2,000 years in age. Forests may also contain other trees such as douglas fir, grand fir, hemlock, bishop pine, tanoak, alder, madrone and bay myrtle. Black bears, Roosevelt elk, deer, raccoons, squirrels, porcupines, salamanders, newts, and the yellow banana slug are also some organisms that live in the coastal redwood forest.

*Pygmy Forest*

These unique forests consist of trees and shrubs which have stunted growth and are low to the ground. Acidic soil with poor fertility along with the wetness of the undrainable ground restricts the growth of many plants in the area causing dwarf conditions in many of them. Although the trees may reach 100 years in age, they rarely grow over the height of a person.

*Coastal Prairie*

Located along the Pacific Ocean, coastal prairie makes up most of the headlands along the Mendocino Coast. Wind, salt spray, grazing and fire are some of the natural disturbances that help to maintain these open grasslands. Coastal prairies of California are some of the most diverse grasslands in North America.

*Rocky Intertidal  
Shore*

The rocky intertidal shore is the area on the coast between the high and low tide marks. Alternatively exposed to the air and submerged completely below the water, the organisms that inhabit this area have adapted to harsh extremes. This narrow strip of habitat usually contains a high diversity of species. Some of the organisms occupying the rocky intertidal shores of the Mendocino Coast include sea anemones, sea stars, chiton, sea urchins, limpets, mussels, snails, and crabs. For SCUBA divers Fort Bragg area is a diving phenomenon.





## Housing and Local Resources

### Housing Contact List

Housing can be hard to find in Fort Bragg. It is especially hard to find affordable one-bedroom rentals. You may want to find a roommate or two to live with, which will decrease your monthly rent and make it a little easier to find a place. Most rentals have a month to month rental agreement. Beware of agreeing to rent a place prior to seeing it in person.

Realtors often have listings for apartments and houses available. The Fort Bragg Advocate and the Mendocino Beacon also have rentals listed in their classifieds. Online sites, such as Craigslist, may also be helpful.

#### **Century 21**

809 N. Main Street  
Fort Bragg, CA 95437  
(707) 964-2121

<http://www.mcn.org/d/pclark/ftbragg/default.ncll>

#### **Fort Bragg Advocate News**

<http://www.advocate-news.com/>

#### **The Mendocino Beacon**

<http://www.mendocinobeacon.com/>

### Local Resource

#### Groceries

Which grocery store you shop at will depend totally on your personal preferences. All have their pros and cons.

#### **Safeway**

660 S. Main  
Fort Bragg, CA 95437  
707-964-4079

This is a very large Safeway (deli, bakery, etc.), there is also a Wells Fargo bank inside which is open 7 days a week. It will be much cheaper if you sign up for a Safeway card.

#### **Harvest Market**

171 Boatyard Dr.  
Fort Bragg, CA 95437  
707-964-7000

Harvest Market is more expensive than the others, but it has a large variety of natural and organic products, as well a local seafood and produce. They also have a great deli with pre-made foods. It's considered a good pit-stop before going out into the field.

#### **Purity**

242 N. Franklin  
Fort Bragg, CA 95437  
707-964-0747

Purity is a small market, and very convenient if you only need a couple things.

#### **Down Home Foods**

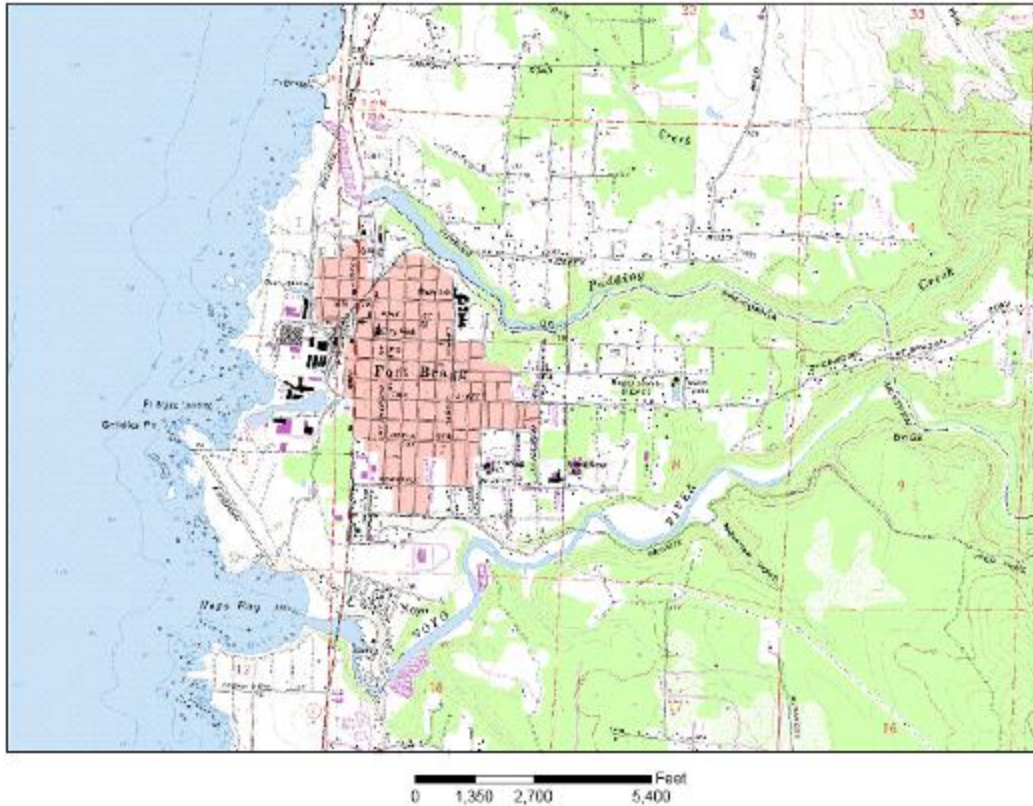
115 S Franklin St.  
Fort Bragg, CA 95437  
707-964-4661

Down Home Foods is a small market as well, but offers more natural and organic foods.



## Community Information

### Map of Area



### Community Demographics

*Population* 7,026 (year 2000)  
*Males vs. Females* 3,523 (50.1%) vs. 3,503 (49.9%)  
*Median Age* 36.2 years  
*Ethnicity* White Non-Hispanic (70.9%), Hispanic (22.7%), Other race (12.1%), Two or more races (4.6%), American Indian (3.8%), Black (1.0%)  
Much more information on Fort Bragg and surrounding towns can be found at <http://www.city-data.com/>.

### Community Services

Fort Bragg Fire Department	141 N. Main St.	707-961-2831
Fort Bragg Police Department	250 Cypress St.	707-961-2800 Business Calls 707-964-0200 Dispatch
Mendocino County Sheriff Department	700 S. Franklin	707-961-2421
Mendocino Coast Hospital	700 River Dr.	707-961-1234
Mendocino Coast Chamber of Commerce	332 N. Main	707-961-6300
Department of Social Services	825 S. Franklin St.	707-962-1136
Fort Bragg Branch Library	499 Laurel St.	707-964-2020



## Entertainment and Community Events

### Resources for Affordable Entertainment Options

There are many outdoor activities in the area that can be done for little or no cost. The Mendocino Coast has several state parks and reserves offering a variety of places to hike, bike, tide-pool, or enjoy other great outdoor activities.

Also, many places in the area give discounts for locals, so it is usually good to mention you live in the area.

Coast Cinemas	167 S. Franklin, Fort Bragg, CA 95437	707-964-2019
	Tuesdays is discount day at the movies. Most movies (except for a few new releases) are \$4.00 all day Tuesdays.	
Emerald Dolphin Mini Golf	1211 S. Main, Fort Bragg, CA 95437	707-964-6699
Noyo Bowl	900 N. Main, Fort Bragg, CA 95437	707-964-4051

### Recurring Event List

<i>First Fridays</i>	Galleries and shops welcome the community to experience art and culture in Fort Bragg the first Friday of every month. From street theater and gallery openings to coffee house concerts, First Friday in Fort Bragg is a must do for visitor and locals alike.
<i>Fort Bragg Farmer's Market</i>	Wednesdays, May – October, 3:30 p.m. – 6 p.m. In the heart of Fort Bragg, Spruce & Main Sts. Vendors bring a wide variety of foods including fine crafted cheese, fresh fish, honey, fruits, vegetables, and flowers.



## Helpful Hints

### Prepare for the Field

Being out in the field can be both exciting and demanding, especially during the winter months. Make sure that you are prepared for the field EVERY DAY because anything can happen!

#### *LAYERS*

When you begin your field work in January, the Mendocino Coast will be very chilly and wet. It can get cold out in the streams. So make sure to wear layers that you can take off or put on easily. Appropriate clothing helps to prevent hypothermia. Wearing cotton is a particular hypothermia risk as it retains water, and water rapidly conducts heat away from the body. Synthetic and wool fabrics provide far better insulation when wet and are quicker to dry. In air, most heat (20 to 40 percent) is lost through the head; covering the head is quite important in reducing the likelihood of hypothermia. Dig out a onesie for dry suits. These polar fleece will keep you warm when wet.

#### *RAIN GEAR*

It rained a lot during our first few months. A light rain jacket will prepare you for the on and off sprinkles. If you have them, rain pants and rubber boots can come in handy however you will only need the rain jacket in the field. A hat or a beanie will help keep your head warm and dry as well.

#### *FIELD GEAR*

Being in the field can get wet and dirty! So don't wear your favorite clothes unless you don't mind them getting dirty.

Your standard field gear that is provided by WSP for you will include:

- Wader and wading belt

- Boots

- Gaiters (to keep rocks and other debris out of your boots)

- Light rain jacket

We also recommend a pair of sturdy gloves that you can work and write in. Many people prefer to wear long underwear in their waders because it is easier to move and climb, plus you stay pretty warm. You can also get by with rain pants or some type of synthetic light material pants. It is not recommended that you wear jeans or heavy pants under the waders.

Take a work vest for: lunch, water, change of clothes and field gear you will need (compass, thermometer, flagging, sharpies, pen/pencil, maps, PDA, etc.).

#### *CHANGE OF CLOTHES*

You are going to get wet! We have come back to the office many times soaked head to toe! So be prepared. Pack a change of socks, a sweatshirt or anything that will keep you warm for the rest of your hike or at least to change into when you get back to the truck.





## **Supplemental Information**

### **Ed Logs & Information**

- Education Logs
- Lesson Plans
- Activities
- Power Points with images for presentations

### **ISP Logs & Information**

- Letter of Intent 2010
- Donation Letter 2010
- ISP Proposal 2010
- ISP Flyer 2010
- ISP Donation contributors
- ISP Recruitment list

### **Site Protocols & Information**

- Office Policies
- Salmonid Spawner Surveys & Adult Trapping
  - Salmonid Spawner Survey Protocol
  - Redd Counts Protocol
  - Weir Protocol
  - Spawner Survey Equipment List
  - Float Survey Checklist
- Downstream Migrant Trapping
  - Downstream Migrant Trapping Protocol
  - Downstream Trapping Kits
  - Salmonid ID Chart

\*\*\*All supplemental information, along with several other helpful documents from previous members, can be found in the AmeriCorps folder on the shared network (the X drive) on the computers in the DFG office. \*\*\*